

CLAIMS

1. A self-adhesive or thermally bondable security document (V) that can be affixed to an article (P), characterized in that it comprises at least one medium (1) capable of receiving print on the front side, said medium having, on its reverse side, at least one self-adhesive or thermally adhesive layer and at least one marker (3) that emits a signal which is characteristic per se, such that, after the document (V) has been bonded by means of said layer of adhesive to the article (P), in the event of disbondment of the document (V) at least part of said marker (3) detaches from the medium (1).
2. The document as claimed in claim 1, characterized in that it is such that, after bonding the document (V), in the event of disbondment of the document (V) at least part of said marker (3) remains attached to said article (P).
3. The document as claimed in either of claims 1 and 2, characterized in that at least part of said marker (3) is contained in a layer, this said layer being such that, after the document (V) has been bonded to the article (P), in the event of disbondment of the document (V) at least part of said layer with said marker (3) remains attached to said article (P).
4. The document (V) as claimed in claim 2, characterized in that said layer containing this part of the marker (3) is the adhesive layer.
5. The document as claimed in either of claims 3 and 4, characterized in that said layer including at least part of said marker (3) is a monolayer having, in the same plane, several bands of different adhesivities and in that at least one of said bands includes at least one part of said marker (3) such that, after the document (V) has been bonded to the article (P), in the event of disbondment of the document (V) at least part of the band including said marker (3) remains attached to said article (P).

6. The document (V) as claimed in one of claims 3 to 5, characterized in that said medium (1) comprises, on its reverse side, several layers deposited on top of one another and having different adhesivity properties, one of the layers including at least part of said marker (3), such that, after the document (V) has been bonded to the article (P), in the event of disbondment of the document (V) at least part of the layer including said marker (3) remains attached to said article (P).
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7. The document as claimed in the preceding claim, characterized in that said layers include one or more types of adhesive.
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8. The document as claimed in one of claims 3 to 7, characterized in that said medium (1) has, on its reverse side, at least one layer having reduced adhesivity properties allowing disbondment of the layer with the marker, such that in the event of disbondment of the document (V) at least part of said layer with said marker (3) remains attached to said article (P).
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9. The document (V) as claimed in one of the preceding claims, characterized in that said layer containing the marker includes one or more layers (2a, 2b) having particular adhesion properties.
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10. The document (V) as claimed in the preceding claim 9, characterized in that said regions (2a, 2b) may take the form of separate features, especially points, lines, bands or alphanumeric characters, or the form of a uniform layer entirely covering the adhesive layer(s).
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11. The document (V) as claimed in claims 6 and 9 to 10, characterized in that the layer containing at least part of the marker (3) includes a single type of adhesive within which the marker (3) is distributed, in different concentrations in defined patterns, especially in the form of adjacent bands, and in that it has regions (2a, 2b) having particular adhesion properties, possibly coinciding with the features of a
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given concentration, in such a way that, in the event of disbondment of the document (V), one region (2a, 2b) remains bonded almost entirely to the medium (1) of said document (V) whereas another region (2a, 2b) remains bonded almost entirely to the article (P).

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12. The document (V) as claimed in one of claims 9 to 11, characterized in that said regions (2a, 2b) have properties that reduce the adhesion between the adhesive and either the document (V) or the article (P) to which the document (V) is affixed.

10 13. The document (V) as claimed in one of claims 9 to 11, characterized in that said regions (2a, 2b) have properties that increase the adhesion between the adhesive and either the document (V) or the article (P) to which the document (V) is affixed.

14. The document (V) as claimed in one of claims 9 to 13, characterized in that said regions (2a, 2b) are a combination of regions having properties that decrease the adhesion and properties that increase the adhesion, respectively.

15 15. The document (V) as claimed in one of the preceding claims, characterized in that at least part of the marker (3) lies within a layer having a controlled melting point, especially above 50°C, preferably equal to about 60 - 65°C, and such that, should there be an attempt at thermal disbondment, said layer results in the creep of at least part of said marker toward the layer(s) that will remain at least partly attached to the article (P), in particular the layer of adhesive.

20 16. The document (V) as claimed in one of the preceding claims, characterized in that the medium (1) is a substrate having weakened regions, especially from the fact that there is internal cohesion reduced by scoring at mid-body, by watermarking and/or by the introduction of components that reduce its cohesion and/or especially from the fact that its edges have been weakened by cutting them into lacing, sawteeth or a comb, and/or by microperforations.

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17. The document (V) as claimed in one of the preceding claims, characterized in that the medium (1) is a multi-ply, especially two-ply, paper having an adhesion-reducing composition between at least two of these plies.
- 5 18. The document (V) as claimed in the preceding claim 17, characterized in that said composition is based on a compound chosen from polyurethanes used in the form of an aqueous dispersion and styrene-butadiene copolymers, especially those that have been carboxylated, used in aqueous dispersion form.
- 10 19. The document (V) as claimed in one of the preceding claims, characterized in that the medium (1) includes components that react with apolar solvents.
20. The document (V) as claimed in the preceding claim 19, characterized in that it includes a layer acting as barrier to the apolar solvents.
- 15 21. The document (V) as claimed in the preceding claim 20, characterized in that said barrier layer has reduced adhesivity properties allowing detachment of the marker with the medium (1) in the event of disbondment of the document (V).
- 20 22. The document (V) as claimed in either of claims 20 and 21, characterized in that said barrier layer has a controlled melting point, in particular above 50°C, and preferably equal to about 60 - 65°C, and such that, in the event of an attempt at thermal disbondment, said layer results in the creep of the marker toward the layer(s) which will remain at least partly attached to the article (P), in particular the
- 25 layer of adhesive.
23. The document (V) as claimed in one of the preceding claims, characterized in that at least part of the article (P), to which the document (V) will be affixed, also contains at least one marker that emits a signal which is combined with the signal
- 30 from the marker (3) of said document (V).

24. The document (V) as claimed in one of the preceding claims, characterized in that said marker (3), and where appropriate the marker of the article (P), is chosen from particles that can be detected by magnetic resonance, magnetic particles that can be detected by a magnetoresistive head, especially from particles of magnetic materials having a medium to high coercitivity, particles that can be excited at given wavelengths, and mixtures thereof.
25. The document (V) as claimed in claims 23 and 24, characterized in that said marker (3) of said document (V) comprises fluorescent particles that emit fluorescence at one wavelength which combines with that emitted by fluorescent particles contained in the article (P) to which said document (V) will be affixed.
26. The document (V) as claimed in claim 13, characterized in that the document (V) includes, as marker (3), one or more types of fluorescent particles that possibly emit at different wavelengths and combine to emit light at a given wavelength and in that, moreover, the article (P) also includes one or more types of fluorescent particles that possibly emit at different wavelengths and combine to emit light at a given wavelength, the resultant of all these emissions giving white light.
27. The document (V) as claimed in one of the preceding claims, characterized in that the medium is a paper having at least one region of reduced opacity, or even a transparent region, allowing the signal from said marker to be detected, especially by visual observation.
28. The document (V) as claimed in one of the preceding claims, characterized in that the medium is a paper having at least one region of reduced thickness, or even zero thickness.
29. A visa obtained from a self-adhesive or thermally bondable document (V) as claimed in one of claims 1 to 28.

30. A passport (P) having a page covered with a bonded visa as claimed in the preceding claim 29.

5 31. A method of authenticating a security article, especially a passport (P) as claimed in claim 30, having a page that includes a marker and is covered by the bonding of a self-adhesive or thermally bondable document (V) as claimed in one of claims 1 to 28, especially a visa as claimed in claim 29, characterized in that the signal emitted by the page/document combination is detected and in that the signal is compared, visually or by means of suitable algorithms, with that prerecorded and
10 emitted by an authentic page/document combination.